

BEFORE THE PUBLIC SERVICE COMMISSION OF UTAH

In the Matter of the Application of	:	
PacifiCorp for Approval of an IRP-Based	:	Docket No. 03-035-14
Avoided Cost Methodology for QF	:	
Projects Larger than One Megawatt	:	

RECONSIDERATION REBUTTAL TESTIMONY OF

PHILIP HAYET

**ON BEHALF OF
THE COMMITTEE OF CONSUMER SERVICES**

February 17, 2006

1 **Q. Please state your name and business address.**

2 A. My name is Philip M. Hayet. I am President of Hayet Power Systems Consulting
3 and my business address is 215 Huntcliff Terrace, Atlanta, Georgia, 30350.

4 **Q. Have you previously filed testimony in this case?**

5 A. Yes, I filed direct, rebuttal and surrebuttal testimony in this case, all on behalf of the
6 Committee of Consumer Services (Committee).

7 **Q. What is the purpose of your rebuttal testimony in this proceeding?**

8 A. The Committee has reviewed the direct testimony filed by PacifiCorp, the Division,
9 Pioneer Wind, Mountain West Consulting, and Wasatch Wind that responded to
10 Commission Staff's questions, published January 19, 2005, and the issues the
11 Commission agreed to reconsider in this proceeding. Staff's questions concern issues
12 associated with avoided transmission costs and losses, which the Commission has
13 also agreed to reconsider. In addition, the Commission plans to reconsider Company
14 requirements for providing access to its GRID computer model.¹ In this testimony I
15 explain the Committee's support or opposition to other parties' positions, and I will
16 present the Committee's recommendations. I will also address a specific comment
17 made in Mr. Collins' testimony, on behalf of Wasatch Wind.

18 **Q. Please summarize the Committee's recommendations.**

19 A. The Committee offers the following recommendations:

20 **Avoided Transmission Costs**

- 21 • The Committee supports the Company's and Division's recommendation to
22 allow PacifiCorp Transmission (PacTrans) to determine avoided transmission
23 costs on a case-by-case basis.

¹ GRID is a modeling tool that simulates the operation of PacifiCorp's system and forecasts system-wide production costs.

- The Committee supports the Company's and the Division's recommendation that avoided transmission payments should only be made to firm QFs.
- The Committee disagrees with the Company's position that avoided transmission payments should only be considered for transmission impacts at the 138 kV level and below.
- The Committee is willing to support a provision that would allow a QF to be able to save time and money by opting out of the benefit portion of the avoided transmission cost assessment determination.

Avoided Transmission Losses

- The Committee supports the Company's and Division's recommendation to determine avoided transmission losses using the proximity based approach.

Grid Access

- The Committee agrees that, in general, the Company's approach to providing Grid is reasonable. However, the Committee is concerned that having only two larger Grid computers available will not be sufficient.
- The Committee recommends that the Company be required to present its plans to port GRID to the Internet, and then seek comments from interested parties. This will allow parties the opportunity to provide comments to improve the implementation process.

Avoided Transmission Costs

Q. Please explain the issue of avoided transmission costs.

A. Avoided transmission costs are the transmission capital investments that QFs may help the utility to avoid or defer as a result of the QF's location on the utility's transmission system. In some cases, PacifiCorp's transmission costs could actually increase, owing to the fact the QF might locate in an area that would require the Company to make additional transmission investments to permit the QF to deliver energy to the load center. Additionally, PacifiCorp's costs could increase if the QF negatively impacts PacifiCorp's existing transmission facilities or operations. The question that the Commission must answer is how PacifiCorp should calculate these avoided transmission costs, when a QF requests indicative pricing. QFs have

proposed that avoided transmission costs should be paid to each QF based on a pro-rata share of the transmission costs that PacifiCorp would incur if it were to build the next IRP resource. The Company and the Division prefer to use a “case-by-case evaluation method” performed by PacTrans to determine avoided transmission costs. The Committee also supports the use of the case-by-case evaluation method, as it believes it would be illogical to base avoided transmission payments on the underlying assumption that QFs, less than 100 MW in size, would allow PacifiCorp to completely avoid the need to build new transmission facilities.

Q. Why does the Committee believe the pro-rata approach is inappropriate?

A. As discussed in the testimony of Mr. Kenneth Houston and Ms. Andrea Coon, there are many complex issues that must be evaluated in deciding where and when to construct new or upgraded transmission facilities. For example, a transmission investment cannot be completely avoided just because a QF decides to locate on the utility’s system at a point that may not bear upon the utility’s load centers, its existing transmission facilities or its generation resources. Typically, a cogeneration plant will locate where an industrial facility already exists, and a renewable resource, such as a wind generator, will locate where wind conditions are most favorable; and neither of those locations may be where the utility and its customers would receive benefits from the avoidance or deferral of transmission investment. It is certainly conceivable that a QF could site at just the right location, with a sufficiently reliable facility, such that, the utility might be able to avoid the need to build additional transmission to serve that area. Under those circumstances, the QF should be entitled to receive the benefit of an avoided transmission payment. However, this

presupposes that the QF would site in just the right location, and would build with a sufficient degree of reliability, which may not turn out to be the case. Therefore, the Committee supports the position set forth by the Company and the Division recommending that avoided transmission payments or charges should be determined on a case-by-case basis. The Committee believes that PacifiCorp's recommendation for PacTrans to conduct an additional transmission analysis to determine the transmission impact caused by the QF is a reasonable approach to determine the transmission savings that the QF might provide.

Q. Does the Committee agree that avoided transmission payments should only be made to firm QFs?

A. Yes, it is typical only to make avoided capacity payments to firm reliable resources. Non-firm generation resources sited near a growing load center would not be an acceptable substitute to constructing additional transmission facilities to deliver remotely sited firm power to the load. If this were permitted and the utility did not construct the transmission facility, customers would be faced with the possibility of service interruptions in the event that the local QF suffers an outage, and the transmission is incapable of delivering enough power to the customers. Moreover, it would be a violation of the ratepayer indifference standard to make an avoided transmission cost payment to a QF that does not, in fact, help the utility avoid having to make a transmission investment.

Q. Are there any aspects of the Company's avoided transmission payment proposal with which the Committee disagrees?

A. The Committee disagrees with the Company's assumption that consideration of transmission impacts should be limited to transmission at the 138 kV level and below. While it seems logical that impacts above 138 kV would be less likely to occur, the Committee is not convinced that transmission impacts above 138 kV will never occur. The Committee recommends that unless the Company can offer definitive proof that impacts above 138 kV will never occur, the Commission should not accept the Company's recommendation to only consider transmission impacts on lines 138 kV and below.

Q. Does the Committee agree with Ms. Coon's proposal for an "opt out" provision of the benefit study portion if developers do not believe that their facility could provide any significant benefits to the transmission system?

A. The Committee believes it would be reasonable to include an opt out provision, which would save the QF time and money in the application process. The Committee notes that Ms. Coon was careful to state that the QF could only opt out of the "benefit study portion", which implies that the QF would not be allowed to opt out of a study to determine any additional costs that the QF should be responsible for, if the QF would cause PacifiCorp to incur additional transmission expenses. The Committee supports an opt out provision for just the benefit portion of the study.

Avoided Transmission Losses

Q. Please explain how avoided transmission losses would be calculated under the Company's proximity approach.

A. The proximity approach considers the location of three elements: the QF, the IRP deferrable resource, and the load center. If the QF locates closer to the load center

than the IRP deferrable resource, then the QF would be credited with a transmission loss payment. However, if the QF locates farther from the load center than the IRP deferrable resource, then the QF would be charged a transmission loss fee.

Q. Does the Committee agree with the Company and the Division regarding the use of this method?

A. The Committee agrees with the simplified approach to calculate avoided transmission losses, using the proximity method. The Company offers this as an alternative to a more detailed approach that PacTrans could perform, although it notes that this would lengthen the evaluation process and would be more costly for the QF. In either event, PacifiCorp will leave it up to the QF to decide which approach it prefers.

Grid Access

Q. What does the Company propose concerning GRID access?

A. The Commission's Order on Reconsideration and Clarification issued February 2, 2006, stated that the Commission would specifically consider UAE's recommendations for access to the GRID model until it is made available by the Company on the internet. Mr. Griswold's testimony stated that the Company expects that Internet access to GRID will be available by the end of July 2006. Until that time, the Company has suggested that it will continue to make available GRID computers and training, as needed, to allow QFs to be able to evaluate the Company's avoided cost offers.

146 **Q. How does PacifiCorp plan to deal with the size limitations that were**
147 **encountered in the GRID computers that it supplied previously until Internet**
148 **access is provided?**

149 A. The Company plans to offer two GRID computers that have hard drives that would
150 allow for up to 24 twenty year model runs to be performed before the hard drive is
151 filled up. If more computers are needed, Mr. Griswold says that the Company can
152 purchase and assemble new computers, but it would require 30 days to prepare the
153 computers.

154 **Q. Does this seem reasonable to the Committee?**

155 A. The Committee is a little concerned about the logistics. Since it will require 30 days
156 to prepare a new computer, the Committee is concerned that having only two
157 computers on hand may be insufficient, based on the following reasons: (1) multiple
158 QFs may simultaneously file for avoided cost payments; (2) PacifiCorp has made a
159 PCAM filing in Utah, which may require regulatory Staff to perform GRID runs; (3)
160 PacifiCorp intends to file a new rate case in Utah on March 1, 2006. Furthermore, in
161 my experience, computer software development projects are typically not completed
162 on time; so the possibility of this project slipping needs to be taken into
163 consideration.

164 **Q. What does the Committee recommend?**

165 A. The Committee recommends that at least one or more additional computers should
166 be prepared now in an attempt to avoid having a shortage of usable computers,
167 especially when the rate case is underway. The Committee would also like the
168 Company to provide more details now concerning the Internet implementation

project. Given the Committee's and other party's experience using GRID, we may be able to share ideas concerning how best to implement the project.

Response to Mr. Collins' Testimony

Q. Mr. Collins' testimony supports a suggestion he said that you made. Can you explain what he is referring to?

A. On page 7 of Mr. Collins' prefiled rehearing testimony, he opines on reasons that he believes that PacifiCorp's methodology to calculate avoided transmission payments is deficient. At the end of one of his responses, he states:

I also support Phil Hayet's suggestion to use a scalar for costs of IRP avoided transmission resource in the base case.

While the Committee attempted to contact Mr. Collins for clarification, we were unable to reach him prior to when this testimony had to be completed. However, we believe that it may relate to comments I made during the hearing, which I will discuss, and I will also point out an additional statement I made at the hearing.

Q. What comments do you believe he was referring to that you made at the September 23, 2005 hearing?

A. During the hearing we discussed how to derive avoided costs for those renewable resources expected to come on-line after the first set of 1,400 MW of renewable resources had been added to the system. At the time, there was considerable disagreement about how avoided transmission costs should be derived, and there were discussions in front of the Commission about how to calculate those costs. Several parties, including myself, attempted to respond about how some components of the calculations should work, yet, portions of the methodology had not been fully

193 thought through by all parties. At the time, I was discussing that there should be
194 some consistency in the calculation of avoided energy and avoided transmission
195 costs for renewable QFs. At line 18 on page 355 of the hearing transcript I stated:

196 *The answer might be if you use an average on the capacity factor you have*
197 *to use an average on the transmission capacity payment.*
198

199 I believe that is the comment to which Mr. Collins referred.

200 **Q. Had you fully thought through all of the issues concerning avoided transmission**
201 **costs at the time you made that statement?**

202 A. No, I had not. At a later point in the hearing, I clarified my earlier comments and
203 said that the Committee preferred to allow PacifiCorp the opportunity to work on an
204 idea that ultimately became the transmission avoided cost case-by-case evaluation
205 method that would be performed by PacTrans. At line 12 on page 384 of the hearing
206 transcript, I stated:

207 *I made a recommendation, and the recommendation was there would be --*
208 *there is an averaging in the capacity factor. This is an idea that I came up*
209 *with, it was off the cuff. The Company has said that that might be*
210 *appropriate, but I think what they have also said to me is that they would*
211 *like to consider that further in terms of the fact that this recommendation*
212 *gets into a transmission payment and they said that by Monday they were*
213 *going to come back with some more information on transmission. So I*
214 *don't think I can say that my recommendation is complete without giving*
215 *them the opportunity to come back on Monday on that entire issue.*
216

217 **Q. Is this the method that the Committee supports to calculate avoided**
218 **transmission costs and benefits?**

219 A. As I have already discussed in my testimony, the Committee supports the Division
220 and the Company in preferring to compute avoided transmission costs and benefits

221 on a case-by-case basis using methods that PacTrans typically relies on to perform
222 transmission impact studies.

223 **Q. Does that complete your testimony?**

224 **A. Yes it does.**